UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,787	11/24/2003	David William Trepess	282533US8X	4633

22850   7590   05/23/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
DWIVEDI, MAHESH H

ART UNIT	PAPER NUMBER
2168	

NOTIFICATION DATE	DELIVERY MODE
05/23/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

	Application No.	Applicant(s)
	10/720,787	TREPESS, DAVID WILLIAM
Office Action Summary	Examiner	Art Unit	
	Mahesh H. Dwivedi	2168	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 February 2007</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25 and 29-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25 and 29-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☒ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/08/2006 has been entered.

Remarks

2.   Receipt of Applicant's Amendment, filed on 02/28/07, is acknowledged. The amendment includes the amending of claims 1, 21, 25, and 29, and the cancellation of claims 26-28. The examiner further wishes to state that foreign priority of 09/19/2002 is accepted in the instant application.

The examiner further wishes to state that there are several published patent applications (PGPUB) with different inventive entities which contain substantial similarities in drawings and specifications with the instant application (See Trepress et al. and Thorpe cited published patent applications).

Priority

3.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

4.   The objections raised in the office action mailed on 11/18/2006 have been overcome by applicant's amendments received on 02/28/2007.

Specification

5. .   The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1-7, 9-11, and 14-27, and 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kohonen et al.** (Article entitled "Self Organization of a Massive Document Collection") and in view of **Derthick** (Article entitled "Interfaces for Palmtop Image Search").

8.   Regarding claim 1, **Kohonen** teaches a video processing apparatus comprising:

A) a memory configured to store a set of distinct information items (Page 575, Section B, Figures 5-6); and

B) an information retrieval system in which the set of distinct information items <u>are mapped</u> to respective nodes in an array of nodes by mutual similarity of the information items, so that similar information items map to nodes at similar positions in the array of nodes (Page 574, Figures 5-6), the information retrieval system includes:

C) a user control configured to define a search criterion for selecting information items (Page 584, Figure 6);

D) a detector configured to detect positions <u>of nodes</u> within the array of nodes, to <u>which</u> the selected information items <u>have been mapped</u> (Page 584, Figures 1, 4-6); and

E) a graphical user interface configured to display display points within a display area on a user display (Page 584, Figures 5-6);

F) <u>positions of the display points determined based on the detected positions of the nodes to which the selected information items have been mapped</u> (Page 584, Figures 1, 4-6).

The examiner notes that **Kohonen** teaches **"a memory configured to store a set of distinct information items"** as "develop the final software for our method" (Page 575, Section B) and "our system operate in real time and fit medium-sized computers" (Page 575, Section B). The examiner further notes that **Kohonen** teaches **"an information retrieval system in which the set of distinct information items <u>are mapped</u> to respective nodes in an array of nodes by mutual similarity of the**

information items, so that similar information items map to nodes at similar positions in the array of nodes" as "documents are presented as points on a two-dimensional (2-D) plane and the geometric relations of the image points of the documents represent their similarity relations" (Page 574). The examiner further notes that **Kohonen** teaches **"a user control configured to define a search criterion for selecting information items"** as "keyword search" (Page 584). The examiner further notes that Figure 6 describes an interface which displays retrieved search results based on the search constraint. The examiner further notes that **Kohonen** teaches **"a detector configured to detect positions <u>of nodes</u> within the array of nodes, to which the selected information items <u>have been mapped</u>"** as "Select labels automatically to characterize map regions" (Figure 1, Step 3). The examiner further notes that the retrieved results depicted in Figures 5 and 6 clearly show positions of nodes retrieved from a query, and located in a defined region within the 2d map. The examiner further wishes to state that Figure 4 clearly shows the information items mapped to respective regions designated by different categories (see Chemistry and Building). The examiner further notes that **Kohonen** teaches **"a graphical user interface configured to display display points which are at positions within a display area on a user display"** as the retrieved results depicted in Figure 6. The examiner further notes that **Kohonen** teaches **"<u>positions of the display points determined based on the detected positions of the nodes to which the selected information items have been mapped</u>"** as "Select labels automatically to characterize map regions" (Figure 1, Step 3). The examiner further notes that the retrieved results depicted in Figures 5 and 6 clearly show positions of nodes retrieved from a query, and located in a defined region within the 2d map. The examiner further wishes to state that Figure 4 clearly shows the information items mapped to respective regions designated by different categories (see Chemistry and Building).

     Kohonen does not explicitly teach:

A) <u>related to contents of items of video material</u>;

G) the graphical user interface also displaying in a sequence in time a plurality of representations of the selected information items.

Derthick, however, teaches **"related to contents of items of video material"** as "video retrieval, our current interfaces segment video into shots, and represent them with single frames" (Page 1,Section 1, Figure 1) and **"the graphical user interface also displaying in a sequence in time a plurality of representations of the selected information items"** as "RSVP slideshow" (Page 1, Section 2) and Figure 1.

The examiner notes that Figure 1 depicts an RSVP image show on an graphical user interface.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 2, **Kohonen** further teaches a video processing apparatus comprising:
A) wherein the graphical user interface is operable to display a two-dimensional display array of said display points (Page 574, Figures 5-6).

The examiner notes that **Kohonen** teaches **"wherein the graphical user interface is operable to display a two-dimensional display array of said display points"** as "documents are presented as points on a two-dimensional (2-D) plane and the geometric relations of the image points of the documents represent their similarity relations" (Page 574).

Regarding claim 3, **Kohonen** further teaches a video processing apparatus comprising:
A) in which the mapping between information items and nodes in the array includes a dither component so that substantially identical information items tend to map to closely spaced but different positions in the array (Page 584, Figures 5-6).

The examiner notes that the Figure 6 of **Kohonen** depicts very similar topics closely coupled together in the large grid.

Regarding claim 4, **Kohonen** further teaches a video processing apparatus comprising:

A) in which the information items are mapped to nodes in the array on the basis of a feature vector derived from each information item (Page 574, Abstract).

The examiner notes that **Kohonen** teaches **"in which the information items are mapped to nodes in the array on the basis of a feature vector derived from each information item"** as "the feature vectors for the documents statistical representations of their vocabularies are used" (Page 574, Abstract) and "Any of the basic projection methods can be used to organize textual data items, such as documents, if their contents are described statistically as some kind of metric feature vectors" (Page 574, Section B).

Regarding claim 5, **Kohonen** further teaches a video processing apparatus comprising:

A) in which the feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of information features (Pages 576, 581).

The examiner notes that **Kohonen** teaches **"in which the feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of information features"** as "in the basic vector-space model [38] the stored documents are represented as real vectors in which each component corresponds to the frequency of occurrence of a particular word in the document" (Page 576, Section A).

Regarding claim 6, **Kohonen** further teaches a video processing apparatus comprising:

A) in which the information items comprise textual information, the feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of words (Pages 576, 581).

The examiner notes that **Kohonen** teaches **"in which the information items comprise textual information, the feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of words"** as "in the basic vector-space model [38] the stored documents are represented as real vectors in which each component corresponds to the frequency of occurrence of a particular word in the document" (Page 576, Section A).

Regarding claim 7, **Kohonen** further teaches a video processing apparatus comprising:

A) in which the information items comprise textual information, the nodes being mapped by mutual similarity of at least a part of the textual information (Page 575).

The examiner notes that **Kohonen** teaches **"in which the information items comprise textual information, the nodes being mapped by mutual similarity of at least a part of the textual information"** as "The models are produced by a learning process that automatically orders them on the 2-D grid along with their mutual similarity" (Page 575, Section II).

Regarding claim 9, **Kohonen** further teaches a video processing apparatus comprising:

A) in which the information items are pre-processed for mapping by excluding words occurring with less than a threshold frequency amongst the set of information items (Page 581).

The examiner notes that **Kohonen** teaches **"in which the information items are pre-processed for mapping by excluding words occurring with less than a threshold frequency amongst the set of information items"** as "The words occurring less than 50 times in the whole corpus, as well as set of common words in a stopword list of 1335 words were removed" (Page 581, Section A).

Regarding claim 10, **Kohonen** further teaches a video processing apparatus comprising:

A) search means for carrying out a search of the information items (Page 584, Figures 5-6);

B) the search means and the graphical user interface being arranged to co-operate so that only those display points corresponding to information items selected by the search are displayed on the user display (Page 584, Figures 5-6).

The examiner notes that **Kohonen** teaches **"search means for carrying out a search of the information items"** as "The words occurring less than 50 times in the whole corpus, as well as set of common words in a stopword list of 1335 words were removed" (Page 581, Section A). The examiner further notes that Figure 6 describes an interface which displays retrieved search results based on the search constraint. The examiner further notes that **Kohonen** teaches **"the search means and the graphical user interface being arranged to co-operate so that only those display points corresponding to information items selected by the search are displayed on the user display"** as the retrieved results depicted in Figure 6 of **Kohonen**.

Regarding claim 11, **Kohonen** does not explicitly teach a video processing apparatus comprising:

A) wherein the said sequence in time is a serial visual presentation of the said representations.

Derthick, however, teaches **"wherein the said sequence in time is a serial visual presentation of the said representations"** as "Rapid Serial Visual Presentation" (Page 1, Abstract) and Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 14, **Kohonen** does not explicitly teach a video processing apparatus comprising:

A) wherein a plurality of streams of representations are displayed at the same time in respective display zones.

Derthick, however, teaches **"wherein a plurality of streams of representations are displayed at the same time in respective display zones"** as "Rapid Serial Visual Presentation" (Page 1, Abstract), "large image grid was continuously visible for SD" (Page 1, Section 2) and Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 15, **Kohonen** further teaches a video processing apparatus comprising:

A) a further user control for selecting a said representation, and causing the display of information related to the selected representation (Page 584, Figures 5-6).

Regarding claim 16, **Kohonen** does not explicitly teach a video processing apparatus comprising:

A) wherein the said representation comprise images.

Derthick, however, teaches **"wherein the said representation comprise images"** as "query image" (Page 1,Section 2, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 17, **Kohonen** does not explicitly teach a video processing apparatus comprising:

A) where the said representations comprise text.

Derthick, however, teaches **"where the said representations comprise text"** as "query text" (Page 1,Section 2, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia and text retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 18, **Kohonen** further teaches a video processing apparatus comprising:

A) wherein the said representation comprises links to the information items represented thereby (Page 583, Figures 5-6).

ᵖ   The examiner notes that **Kohonen** teaches **"wherein the said representation comprises links to the information items represented thereby"** as "clicking a point on the map display with a mouse, links to the document database, enable reading the contents of the documents" (Page 583, Figures 5-6).

The examiner notes that "clicking a point on the map display with a mouse, links to the document database, enable reading the contents of the documents" (Page 583, Figures 5-6) is analogous to **"wherein the said representation comprises links to the information items represented thereby"**.

Regarding claim 19, **Kohonen** does not explicitly teach a video processing apparatus comprising:

A) A portable data processing device comprising a video processing apparatus according to claim 1.

Derthick, however, teaches **"A portable data processing device comprising a video processing apparatus according to claim 1"** as "palmtop interfaces" (Page

1,Section 2, Figure 1) and "video retrieval, our current interfaces segment video into shots, and represent them with single frames" (Page 1,Section 1, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 20, **Kohonen** does not explicitly teach a video processing apparatus comprising:

A) Video acquisition and/or processing apparatus comprising a video processing apparatus according to claim 1.

Derthick, however, teaches **"Video acquisition and/or processing apparatus comprising a video processing apparatus according to claim 1"** as "video retrieval, our current interfaces segment video into shots, and represent them with single frames" (Page 1,Section 1, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 21, **Kohonen** teaches a method comprising:

A) in which a set of distinct information items <u>are mapped</u> to respective nodes in an array of nodes by mutual similarity of the information items, so that similar information items map to nodes at similar positions in the array of nodes (Page 574, Figures 5-6);

B) defining a search criterion for selecting information items (Page 584, Figures 5-6);

C) detecting positions <u>of nodes,</u> within the array of nodes to <u>which</u> the selected information items <u>have been mapped</u> (Page 584, Figures 1, 4-6); and

D) displaying display points within a display area on a user display (Page 584, Figures
5-6);

E) positions of the display points determined based on the detected positions of the
nodes to which the selected information items have been mapped (Page 584, Figures 1,
4-6).

    The examiner notes that **Kohonen** teaches **"in which a set of distinct**
information items are mapped to respective nodes in an array of nodes by mutual
similarity of the information items, so that similar information items map to nodes
at similar positions in the array of nodes" as "documents are presented as points on
a two-dimensional (2-D) plane and the geometric relations of the image points of the
documents represent their similarity relations" (Page 574). The examiner further notes
that **Kohonen** teaches **"defining a search criterion for selecting information items"**
as "keyword search" (Page 584). The examiner further notes that Figure 6 describes an
interface which displays retrieved search results based on the search constraint. The
examiner further notes that **Kohonen** teaches **"a detector configured to detect**
positions of nodes within the array of nodes, to which the selected information
items have been mapped" as "Select labels automatically to characterize map
regions" (Figure 1, Step 3). The examiner further notes that the retrieved results
depicted in Figures 5 and 6 clearly show positions of nodes retrieved from a query, and
located in a defined region within the 2d map. The examiner further wishes to state that
Figure 4 clearly shows the information items mapped to respective regions designated
by different categories (see Chemistry and Building). The examiner further notes that
Kohonen teaches **"displaying display points which are at positions within a**
display area on a user display corresponding to the selected information items"
as the retrieved results depicted in Figure 6. The examiner further notes that **Kohonen**
teaches **"positions of the display points determined based on the detected**
positions of the nodes to which the selected information items have been
mapped" as "Select labels automatically to characterize map regions" (Figure 1, Step
3). The examiner further notes that the retrieved results depicted in Figures 5 and 6
clearly show positions of nodes retrieved from a query, and located in a defined region

within the 2d map. The examiner further wishes to state that Figure 4 clearly shows the information items mapped to respective regions designated by different categories (see Chemistry and Building).

Kohonen does not explicitly teach:

A) related to contents of items of video material

F) the graphical user interface also displaying in a sequence in time a plurality of representations of the selected information items.

Derthick, however, teaches **"related to contents of items of video material"** as "video retrieval, our current interfaces segment video into shots, and represent them with single frames" (Page 1,Section 1, Figure 1) and **"the graphical user interface also displaying in a sequence in time a plurality of representations of the selected information items"** as "RSVP slideshow" (Page 1, Section 2) and Figure 1.

The examiner notes that Figure 1 depicts an RSVP image show on an graphical user interface.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 22, **Kohonen** further teaches a method comprising:

A) wherein the step of displaying displays a two-dimensional display array of said display points (Page 574, Figures 5-6).

The examiner notes that **Kohonen** teaches **"wherein the step of displaying displays a two-dimensional display array of said display points"** as "documents are presented as points on a two-dimensional (2-D) plane and the geometric relations of the image points of the documents represent their similarity relations" (Page 574).

Regarding claim 23, **Kohonen** does not explicitly teach a method comprising:

A) wherein the said sequence in time is a serial visual presentation of the said representations.

Derthick, however, teaches **"wherein the said sequence in time is a serial visual presentation of the said representations"** as "Rapid Serial Visual Presentation" (Page 1, Abstract) and Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 24, **Kohonen** further teaches a method comprising:
A) a further user control for selecting a said representation, and causing the display of information related to the selected representation (Page 584, Figures 5-6).

Regarding claim 25, **Kohonen** further teaches a method comprising:
A) A computer readable storage medium embedded with a computer program for making a computer perform the method according to claim 21 (Page 575, Section B, Figures 5-6).

The examiner notes that Kohonen teaches "**A computer readable storage medium embedded with a computer program for making a computer perform the method according to claim 21**" as "develop the final software for our method" (Page 575, Section B) and "our system operate in real time and fit medium-sized computers" (Page 575, Section B).

Regarding claim 26, **Kohonen** further teaches a method comprising:
A) A storage medium for providing program code according to claim 25 (Page 575, Section B, Figures 5-6).

The examiner notes that **Kohonen** teaches **"A storage medium for providing program code according to claim 25"** as "develop the final software for our method"

(Page 575, Section B) and "our system operate in real time and fit medium-sized computers" (Page 575, Section B).

Regarding claim 27, **Kohonen** further teaches a method comprising:

A) A medium according to claim 26, the medium being a storage medium (Page 575, Section B, Figures 5-6).

The examiner notes that **Kohonen** teaches **"A medium according to claim 26, the medium being a storage medium"** as "develop the final software for our method" (Page 575, Section B) and "our system operate in real time and fit medium-sized computers" (Page 575, Section B).

Regarding claim 29, **Kohonen** teaches a interface comprising:

A) a memory that stores a set of distinct information items (Page 575, Section B, Figures 5-6); and

B) an information retrieval system in which a set of distinct information items are mapped to respective nodes in an array of nodes by mutual similarity of the information items, so that similar information items map to nodes at similar positions in the array of nodes (Page 574, Figures 5-6)

C) a user control for defining a search criterion for selecting information items (Page 584, Figure 6); and

D) a graphical user interface having a display area arranged to display display points within a display area (Page 584, Figures 5-6);

E) positions of the display points determined based on the detected positions of the nodes to which the selected information items have been mapped (Page 584, Figures 1, 4-6).

The examiner notes that **Kohonen** teaches **"a memory that stores a set of distinct information items"** as "develop the final software for our method" (Page 575, Section B) and "our system operate in real time and fit medium-sized computers" (Page 575, Section B). The examiner further notes that **Kohonen** teaches **"an information retrieval system in which a set of distinct information items are mapped to**

respective nodes in an array of nodes by mutual similarity of the information items, so that similar information items map to nodes at similar positions in the array of nodes" as "documents are presented as points on a two-dimensional (2-D) plane and the geometric relations of the image points of the documents represent their similarity relations" (Page 574). The examiner further notes that **Kohonen** teaches **"a user control for defining a search criterion for selecting information items"** as "keyword search" (Page 584). The examiner further notes that Figure 6 describes an interface which displays retrieved search results based on the search constraint. The examiner further notes that **Kohonen** teaches **"a graphical user interface having a display area arranged to display points which are at positions within a display area corresponding to the selected information items"** as the retrieved results depicted in Figure 6. The examiner further notes that **Kohonen** teaches **"positions of the display points determined based on the detected positions of the nodes to which the selected information items have been mapped"** as "Select labels automatically to characterize map regions" (Figure 1, Step 3). The examiner further notes that the retrieved results depicted in Figures 5 and 6 clearly show positions of nodes retrieved from a query, and located in a defined region within the 2d map. The examiner further wishes to state that Figure 4 clearly shows the information items mapped to respective regions designated by different categories (see Chemistry and Building).

Kohonen does not explicitly teach:

A) related to contents of items of video material; and

F) a display area arranged to display in a sequence in time a plurality of representations of the selected information items.

Derthick, however, teaches **"related to contents of items of video material"** as "video retrieval, our current interfaces segment video into shots, and represent them with single frames" (Page 1,Section 1, Figure 1) and **"the graphical user interface also displaying in a sequence in time a plurality of representations of the selected information items"** as "RSVP slideshow" (Page 1, Section 2) and Figure 1.

The examiner notes that Figure 1 depicts an RSVP image show on an graphical user interface.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 30, **Kohonen** further teaches a interface comprising:
A) wherein graphical user interface displays a two-dimensional display array of said display points (Page 574, Figures 5-6).

The examiner notes that **Kohonen** teaches **"wherein graphical user interface displays a two-dimensional display array of said display points"** as "documents are presented as points on a two-dimensional (2-D) plane and the geometric relations of the image points of the documents represent their similarity relations" (Page 574).

Regarding claim 31, **Kohonen** does not explicitly teach a interface comprising:
A) wherein the said sequence in time is a serial visual presentation of the said representations.

Derthick, however, teaches **"wherein the said sequence in time is a serial visual presentation of the said representations"** as "Rapid Serial Visual Presentation" (Page 1, Abstract) and Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

Regarding claim 32, **Kohonen** further teaches a interface comprising:

A) a further user control for selecting a said representation, and causing the display of information related to the selected representation (Page 584, Figures 5-6).

Regarding claim 33, **Kohonen** further teaches a interface comprising:

A) a user control for applying further search criteria to the search (Pages 583-584, Figures 5-6).

The examiner notes that **Kohonen** teaches **"a user control for applying further search criteria to the search"** as "If the map is large, subsets of it can first be viewed by zooming" (Pages 583, Section E).

Regarding claim 34, **Kohonen** does not explicitly teach a interface comprising:

A) a presentation control for controlling the presentation of the said sequence of representations.

Derthick, however, teaches **"a presentation control for controlling the presentation of the said sequence of representations"** as "very large scrollbar" (Page 1, Section 2, Figure 1) and "countdown timer" (Page 1, Section 2, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** would have allowed **Kohonen's** to provide a method for having an efficient multiple image/multimedia retrieval based on RSVP premises, as noted by **Derthick** (Abstract).

9.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kohonen et al.** (Article entitled "Self Organization of a Massive Document Collection") and in view of **Derthick** (Article entitled "Interfaces for Palmtop Image Search") as applied to claims 1-7, 9-11, and 14-27, and 29-34, and further in view of **Doerre et al.** (U.S. Patent 6,446,061).

10.   Regarding claim 8, **Kohonen** and **Derthick** do not explicitly teach a video processing apparatus comprising:

A) in which the information items are pre-processed for mapping by excluding words occurring with more than a threshold frequency amongst the set of information items.

Doerre, however, teaches **"in which the information items are pre-processed for mapping by excluding words occurring with more than a threshold frequency amongst the set of information items"** as "a solution to this problem the invention suggests to use names, terms, and general words, but to apply filtering to remove high-frequency terms and very low-frequency terms" (Column 18, lines 45-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** and **Doerre's** would have allowed **Kohonen's** to provide a method to prevent cluster coherence at the expense of meaningful cluster descriptors, as noted by **Doerre** (Column 18, lines 41-44).

11.   Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kohonen et al.** (Article entitled "Self Organization of a Massive Document Collection") and in view of **Derthick** (Article entitled "Interfaces for Palmtop Image Search") as applied to claims 1-7, 9-11, and 14-27, and 29-34, and further in view of **Bruijn et al.** (Article entitled "Patterns of Eye Gaze during Rapid Serial Visual Presentation").

12.   Regarding claim 12, **Kohonen** and **Derthick** do not explicitly teach a video processing apparatus comprising:

A) wherein the said representations are displayed one at a time in sequence in the same display zone.

Bruijn, however, teaches **"wherein the said representations are displayed one at a time in sequence in the same display zone"** as "Keyhole RSVP" (Pages 1-2, Section I) and "We use the term Keyhole RSVP when all the images appear, in rapid sequence, in the same location at the same size" (Pages 1-2, Section I).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Derthick's** and **Bruijn's** would have allowed **Kohonen's** to provide a method for multiple ways to express different RSVP configurations.

Regarding claim 13, **Kohonen** and **Derthick** do not explicitly teach a video processing apparatus comprising:

A) wherein a plurality of said representations are displayed at the same time in respective display zones.

Bruijn, however, teaches **"wherein a plurality of said representations are displayed at the same time in respective display zones"** as "Collage RSVP" (Page 2, Section I) and "a set of images being deposited, in rapid sequence, on a table top in such a way that five or six are visible at any one time" (Page 2, Section I).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching Derthick's and Bruijn's would have allowed Kohonen's to provide a method for multiple ways to express different RSVP configurations.

Response to Arguments

13.   Applicant's arguments filed on 02/28/2007 have been fully considered but they are not persuasive.

Applicant argues on page 9, that **"Although Kohonen et al. suggests a memory in the system, Kohonen et al. does not teach or suggest that the memory stores a set of distinct information items related to contents of video materials"**. However, Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection (See use of secondary reference Derthick).

Applicant argues on page 10, that **"Similarly, Derthick also fails to teach or suggest a memory storing a set of distinct information items related to contents of items of video material"**. However, the examiner wishes to point to Section 1 of Derthick which states "our current interfaces segment the video into shots, and represent them with single frames" (Section 1: Previous Work). The examiner wishes to state that it is clear that Derthick's methods are related to video material.

Applicant argues on page 10, that **"Instead, in Kohonen et al., the "positions," which must be detected in order to rank the search result, are those of the matching locations in the document. Kohonen et al. does not disclose detecting positions of nodes, to which selected information items have been mapped, the mapping having been performed based on mutual similarity of the information**

items, as recited in Claim 1. Thus, Kohonen et al. fails to teach or suggest "a detector configured to detect positions of nodes, within the array of nodes, to which the selected information items have been mapped". However, the examiner wishes to point to Figures 1, 4, and 6 of **Kohonen** which state "Select labels automatically to characterize map regions", "Distribution of four sample subsections of the patent classification system on the document map. The grey level indicates the logarithm of the number of patents in each node", and "As seen from the map display, the matches are distributed into several tight clusters found in different regions of the map". The examiner further wishes to state that having search results from different defined regions, each of which contain distinct information items already mapped to that region (which contains several nodes having those information items), **Kohonen** clearly detects positions of nodes since the information items are mapped to the returned nodes.

Applicant argues on page 11, that **"However, Kohonen et al. does not teach or suggest that the positions of the circles are determined based on the detected position of the nodes to which the selected information items have been mapped".** However, the examiner wishes to point to Figures 1, 4, and 6 of **Kohonen** which state "Select labels automatically to characterize map regions", "Distribution of four sample subsections of the patent classification system on the document map. The grey level indicates the logarithm of the number of patents in each node", and "As seen from the map display, the matches are distributed into several tight clusters found in different regions of the map". The examiner further wishes to state that having search results from different defined regions, each of which contain distinct information items already mapped to that region (which contains several nodes having those information items), **Kohonen** clearly detects positions of display points since the information items are returned from different regions.

Conclusion

14.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. PGPUB 2003/0208485 issued to **Castellanos** on 06 November 2003. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. Patent 7,017,186 issued to **Day** on 21 March 2006. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. PGPUB 2005/0027704 issued to **Hammond et al.** on 03 February 2005. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use preprocess words from documents).

U.S. Patent 5,864846 issued to **Voorhees et al.** on 26 January 1999. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use preprocess words from documents).

U.S. PGPUB 2003/0217335 issued to **Chung et al.** on 20 November 2003. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. Patent 7,031,909 issued to **Mao et al.** on 18 April 2006. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. PGPUB 2004/0107221 issued to **Trepess et al.** on 03 June 2004. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. PGPUB 2004/0056886 issued to **Trepess et al.** on 25 March 2004. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. PGPUB 2004/0107194 issued to **Thorpe** on 03 June 2004. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. PGPUB 2004/0130569 issued to **Thorpe** on 08 July 2004. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. PGPUB 2004/0139105 issued to **Trepess et al.** on 15 July 2004. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

U.S. PGPUB 2006/0095852 issued to **Trepess et al.** on 04 May 2006. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

Article entitled "Analysis of Processes and Large Data Sets by a Self-Organizing Method" by **Kohonen**, dated 1999. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

Article entitled "A Self-organizing Semantic Map for Information Retrieval" by **Lin**, dated 07 July 1997. The subject matter disclosed therein is pertinent to that of claims 1-25 and 29-34 (e.g., methods to use SOM mapping).

Contact Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi
Patent Examiner
Art Unit 2168

TIM VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

May 11, 2007